



A121 + lens

Antenna Datasheet v1.0



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1 Revision History

Revision	Comment
v1.0	Released version



2 A121 Antenna specification

The antennas (Tx, Rx) are integrated in the A121 package (AiP).

A121 Antenna specification	Description
Number of antennas	1 Tx, 1 Rx
Type of antenna	Folded dipole antennas, integrated in package (AiP)
Frequency range	57-64 GHz
Antenna peak gain	6 dBi

Table 2.1 A121 Antenna specification

Antenna in Package (AiP) dimensions are shown in figure 2.1.

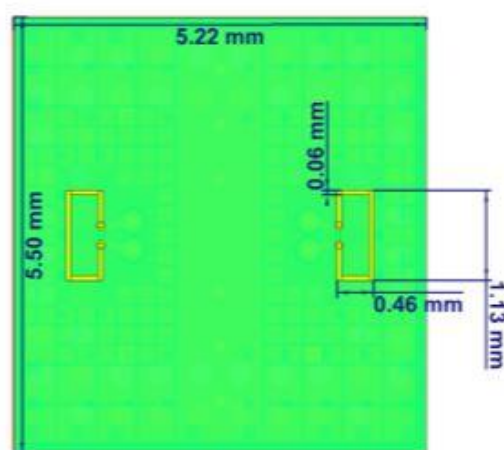


Figure 2.1 A121 Antenna in Package (AiP) dimensions



The A121 radiation pattern, Horizontal plane and Elevation plane, is shown in figure 2.2 and figure 2.3.

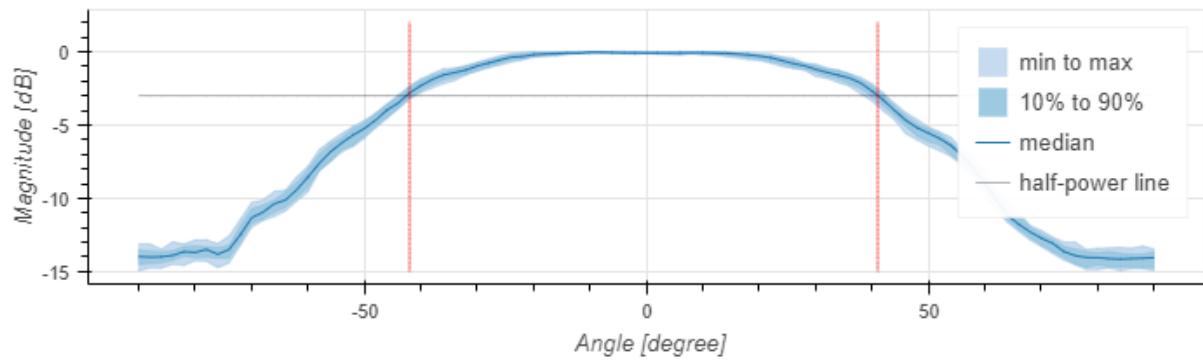


Figure 2.2 A121 normalized radiation pattern at H-plane

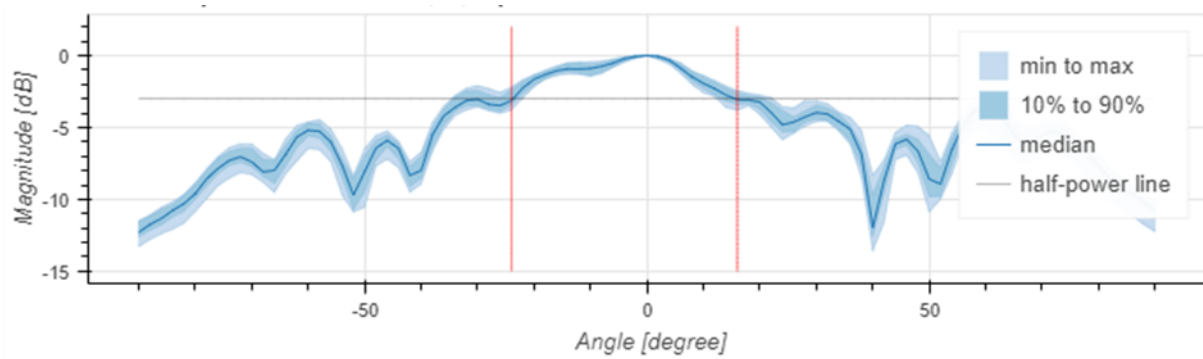


Figure 2.3 A121 normalized radiation pattern at E-plane



Figure 2.4. HBL lens diameter 36.3 mm and height 9 mm

Table 2.2 Radiation properties of lenses, FS – Free space

XE121 with LH121 holder	Max. Gain (dB_{FS})	HPBW-E (degree)	HPBW-H (degree)	Max. Gain (dB_{FS})	HPBW-E (degree)	HPBW-H (degree)
Distance from PCB to Lens in D1 = 3mm and D2 = 8.3mm	D1*	D1*	D1*	D2*	D2*	D2*
HBL	13	15	20	17	11	12

*Other combinations of distance and lens that generated a gain below 13 dB will be possible



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